



1.



2a.



2b.



1a.



2.

uniform pale yellow. Head, thorax, and abdomen yellow; legs yellow, banded with brown. Expanse $1\frac{3}{4}$ inch.

Hab. West Africa, Old Calabar. Mus. Druce.

In form this species resembles *C. rudis*, Walker, but in colour and markings it is very distinct.

LECHENOPTERYX FULVIA, sp. n.

Primaries pinkish brown, crossed near the outer margin from near the apex to the inner margin by a black line, bordered on the inner side with yellow; a small white dot edged with black at the end of the cell; secondaries pinkish brown, with the same coloured line extending from the apex to the inner margin close to the anal angle. Underside much paler than above, and the black lines not edged with yellow. Head, thorax, and abdomen pinkish brown; antennæ brown; legs darker brown. Expanse $1\frac{3}{4}$ inch.

Hab. East Africa; Zanzibar. Magila (*Craven*). Mus. Druce.

EXPLANATION OF THE PLATES.

PLATE XXXVII.

Fig. 1. *Attacus albidus*, sp. n., ♂, p. 409.

PLATE XXXVIII.

Fig. 1. *Bunæa pygela*, sp. n., ♂, p. 409.

2. *Antheræa dolabella*, sp. n., ♂, p. 409.

3. *Chrysopoloma rosea*, sp. n., p. 410.

4. — *citrina*, sp. n., p. 410.

12. First Report on Additions to the Batrachian Collection in the Natural-History Museum. By G. A. BOULANGER.

[Received June 28, 1886.]

(Plate XXXIX.)

The following is a list of all the species of Batrachians added to the National Collection since the publication of the last edition of the Catalogue (1882). To such names as are not mentioned in that work, reference to the original description is appended; an asterisk indicates that the type specimen is in the collection. The list is followed by the descriptions of a few new species.

ECAUDATA.

- *1. *Ceratobatrachus guentheri*, Blgr. P. Z. S. 1884, p. 212.—Solomon Islands (*Guppy*).
- *2. *Rana bufoniformis*, Blgr. l. c. p. 210.—Solomons (*Guppy*).
- *3. *Rana steinosignata*, Murray, Ann. N. H. (5) 1885, xvi. p. 120. —Sind (*Murray*).
- *4. *Rana guppyi*, Blgr. l. c. p. 211—Solomons (*Guppy*).
- *5. *Rana opisthodon*, Blgr. l. c. p. 211.—Solomons (*Guppy*).
6. *Rana septentrionalis*, Baird.—Canada (*Lataste*).

- *7. *Rana forreri*, Blgr. Ann. N. H. (5) 1883, xi. p. 343.—Presidio, W. Mexico (*Forrer*).
- *8. *Rana macrocnemis*, Blgr. P. Z. S. 1885, p. 22.—Brusa (*v. Maltzan*).
9. *Rana iberica*, Blgr.—Serra de Gerez, Portugal (*Gadow*).
10. *Rana latastii*, Blgr.—Various localities in North Italy (*Camerano and de Betta*).
- *11. *Rana martensi*, Blgr., *infra*.—Yedo (*v. Martens*).
- *12. *Rana pustulosa*, Blgr. Ann. N. H. (5) 1883, xi. p. 343.—Ventanas, W. Mexico (*Forrer*).
13. *Rana nicobariensis*, Stol.—Nias (*Sandemann*).
- *14. *Rana masonii*, Blgr. Ann. N. H. (5) 1884, xiii. p. 397.—Batavia (*Mason*).
- *15. *Rana macropus*, Blgr., *infra*.—Loo Choo Islands (*Carpenter*).
16. *Rana ulcerosa*, Bttg.—Nossi Bé (*Senckenberg Mus.*).
17. *Rana granulata*, Bttg.—Nosi Bé (*Senckenberg Mus.*).
18. *Rana buergeri*, Schleg.—Japan (*Anderson*).
19. *Rhacophorus dispar*, Bttg.—Nossi Bé (*Senckenberg Mus.*).
- *20. *Rhucophorus lateralis*, Blgr. Ann. N. H. (5) 1883, xii. p. 162.—Malabar (*Beddome*).
- *21. *Ixalus asper*, Blgr., *infra*.—Larut, Perak (*Wray*).
- *22. *Cornufer guppyi*, Blgr. P. Z. S. 1884, p. 211.—Solomons (*Guppy*).
- *23. *Cornufer solomonis*, Blgr. l. c. p. 212.—Solomons (*Guppy*).
- *24. *Rappia burtonii*, Blgr. Ann. N. H. (5) 1883, xii. p. 163.—Gold Coast (*Burton and Cameron*).
25. *Nyctixalus margaritifera*, Blgr. Ann. N. H. (5) 1882, x. p. 35.—Willis Mountains, Java (*v. Lucgel*).
- *26. *Prostherapis femoralis*, Blgr. P. Z. S. 1883, p. 635.—Yurimaguas (*Hahnel*).
27. *Mantella ebenawi*, Bttg.—Nossi Bé (*Senckenberg Mus.*).
- *28. *Dendrobates reticulatus*, Blgr. l. c. p. 635.—Yurimaguas (*Hahnel*).
- *29. *Dendrobates fantasticus*, Blgr. l. c. p. 636.—Yurimaguas (*Hahnel*).
- *30. *Dendrobates hahnelii*, Blgr. l. c. p. 636.—Yurimaguas (*Hahnel*).
- *31. *Hypopachus oxyrrhinus*, Blgr. Ann. N. H. (5) 1883, xii. p. 344.—Presidio (*Forrer*).
- *32. *Microhyla fissipes*, Blgr. Ann. N. H. (5) 1884, xiii. p. 397.—Taiwanfoo, Formosa.
33. *Rhombophryne testudo*, Bttg.—Nossi Bé (*Senckenberg Mus.*).
34. *Cophyla phyllodactyla*, Bttg.—Nossi Bé (*Senckenberg Mus.*).
35. *Pseudis mantidactyla*, Cope.—Rio Grande do Sul (*v. Ihering*).
Montevideo (*Paris Mus.*). R. de la Plata (*Gairdner*).
- *36. *Phyllobates trilineatus*, Blgr. P. Z. S. 1883, p. 636.—Yurimaguas (*Hahnel*).
37. *Hylodes brocchii*, Blgr. in Brocchi, Miss. Sc. Mex., Batr. p. 60.—Vera Paz (*Salvin*).
38. *Hylodes augusti*, Brocchi.—Ventanas (*Forrer*).

- *39. *Hylodes vertebralis*, Blgr., *infra*.—Intac, Ecuador (*Buckley*).
- *40. *Paludicola gracilis*, Blgr. Ann. N. H. (5) 1883, xi. p. 17.—Rio Grande do Sul (*v. Ihering*). Uruguay.
41. *Paludicola falcipes*, Hens.—R. Grande do Sul (*v. Ihering*).
42. *Paludicola olfersii*, Martens, Nomencl. Rept. Mus. Berol. p. 40.—Brazil (*Berlin Museum*).
- *43. *Leptodactylus discodactylus*, Blgr. P. Z. S. 1883, p. 637.—Yurimaguas (*Hahnel*).
44. *Leptodactylus gracilis*, D. & B.—Rio Grande do Sul (*v. Ihering*).
- *45. *Leptodactylus rhodomystax*, Blgr. l. c. p. 637.—Yurimaguas (*Hahnel*).
- *46. *Leptodactylus diptyx*, Bttg. Zeitschr. f. Naturw. 1885, lviii. p. 244.—Paraguay.
- *47. *Limnodynastes olivaceus*, De Vis, Proc. Linn. Soc. N. S. W. 1884, ix. p. 66.—Queensland (*Ling Roth*).
48. *Eupemphix nattereri*, Stdchr.—Paraguay.
49. *Bufo mexicanus*, Brocchi.—Ciudad (*Forrer*).
- *50. *Bufo andersonii*, Blgr. Ann. N. H. (5) 1883, xii. p. 163.—Ajmere and Muscat (*Blanford*). Tatta, Sind.
- *51. *Bufo formosus*, Blgr. P. Z. S. 1883, p. 140.—Yokohama ('*Challenger*').
52. *Bufo punctatus*, B. & G.—La Paz, Cal. (*Smithson. Inst.*).
53. *Hyla nasica*, Cope.—Rio Grande do Sul (*v. Ihering*). Soriano, Uruguay (*Havers*). Paraguay.
- *54. *Hyla glandulosa*, Blgr. Ann. N. H. (5) xii. 1883, p. 164.—Guatemala (*Godman*).
- *55. *Hyla macrops*, Blgr. l. c. p. 164.—Treasury Island, Solomons (*Guppy*).
56. *Hyla thesaurensis*, Ptrs.—Treasury Island (*Guppy*).
57. *Hyla stoufferi*, Cope.—Guatemala (*Godman*).
- *58. *Pterohyla fodiens*, Blgr. Ann. N. H. (5) 1882, x. p. 326.—Presidio (*Forrer*).
- *59. *Phyllomedusa iheringii*, Blgr. Ann. N. H. (5) 1885, xvi. p. 88.—Rio Grande do Sul (*v. Ihering*).
- *60. *Phyllomedusa perlata*, Blgr. P. Z. S. 1883, p. 638.—Yurimaguas (*Hahnel*).
- *61. *Triprion spatulatus*, Gthr. Ann. N. H. (5) 1882, x. p. 279.—Presidio (*Forrer*).
62. *Scaphiopus couchii*, Baird.—Presidio (*Forrer*).
- *63. *Megalophrys longipes*, Blgr. P. Z. S. 1885, p. 850.—Perak (*Wray*).

CAUDATA.

- *1. *Hynobius lichenatus*, Blgr. Ann. N. H. (5) 1883, xii. p. 165.—Awomori, Japan (*Lewis*).
- *2. *Geomolge fischeri*, Blgr., *infra*.—Manchuria (*Fischer*).
3. *Plethodon croceator*, Cope.—San Diego, Cal. (*Forrer*).
- *4. *Spelerpes peruvianus*, Blgr. Ann. N. H. (5) 1883, xii. p. 165.—Moyobamba, Peru (*Roff*).

APODA.

- *1. *Epicrionops bicolor*, Blgr. Ann. N. H. (5) 1883, xi. p. 202.—
Intac, Ecuador (*Buckley*).
- *2. *Cœcilia buckleyi*, Blgr. Ann. N. H. (5) 1884, xiii. p. 398.—
Intac (*Buckley*).
3. *Dermophis thomensis*, Bocage.—S. Thomé (*Berlin Mus.*).
- *4. *Cryptopsophis multiplicatus*, Blgr. Ann. N. H. (5) 1883, xii.
p. 166.—Seychelles (*Günther*).
5. *Gymnopsis unicolor*, A. Dum.—Cayenne (*Bavay*).
- *6. *Scolecormorphus kirkii*, Blgr. Ann. N. H. (5) 1883, xi.
p. 48.—Near Lake Tanganyika (*Kirk*).
7. *Chthonerpeton indistinctum*, R. & L.—Porto Alegre (*Berlin
Mus.*).

RANA MARTENSI, sp. n.

Allied to *R. temporaria*. Vomerine teeth in two rather oblique oval groups, extending posteriorly beyond the line of the choanæ. Head about as long as broad, very similar to that of *R. agilis*; nostril equally distant from the eye and the end of the snout; interorbital space narrower than the upper eyelids; tympanum rather large, its diameter equalling about two thirds that of the eye, from which it is separated by a space equal to about half its diameter. The first finger extends beyond the second. The tibio-tarsal articulation reaches the eye or the nostril; tibia shorter than the fore limb. Inner metatarsal tubercle rather strong, blunt, oval; outer tubercle absent, or scarcely marked; subarticular tubercles of fingers and toes moderate; toes two-thirds webbed. Skin smooth; lateral fold rather narrow, moderately prominent. Coloration very similar to that of *R. agilis*, save that the whitish streak bordering the temporal spot inferiorly does not extend forwards beyond the eye. Male with internal vocal sacs.

Yedo; several specimens (4410, 4411) in the Berlin Museum, one of which was obtained for the British Museum. Collected by Dr. E. von Martens (*cf.* Preuss. Exped. n. Ost-Asien, Zool. i. p. 111).

RANA MACROPUS.

Ixalus japonicus, Hallow. Proc. Ac. Philad. 1860, p. 501.

Vomerine teeth in two rather indistinct oblique series between the choanæ, widely separated in the middle. Snout obtuse, as long as the diameter of the orbit; nostril nearer the end of the snout than the eye; canthus rostralis well marked, curved; loreal region concave; eye large; interorbital space narrower than the upper eyelid; tympanum very distinct, measuring not quite half the diameter of the eye. Fingers moderate, slightly depressed, first shorter than second; toes moderate, three-fourths webbed; tips of fingers and toes dilated into well-developed disks, which are much smaller than the tympanum; subarticular tubercles moderate; a single, oval, inner metatarsal tubercle; no tarsal fold. When the fore limb is stretched

forwards, the femoro-tibial articulation reaches the shoulder and the tibio-tarsal far beyond the end of the snout; tibia as long as the fore limb. Upper surfaces with small warts intermixed with elongate fold-like ones, which form an)(-shaped figure on the scapular region; a strong fold from eye to shoulder. Dark brown above, with darker marblings and regular cross bars on the limbs; lips with a series of dark brown spots; lower surfaces white.

From snout to vent 34 millim.

A single (half-grown?) specimen was obtained at Oho Sima, Loo Choo Islands, and presented to the Museum by Lieut. Alfred Carpenter, R.N., of H.M.S. 'Magpi.'

IXALUS ASPER, sp. n. (Plate XXXIX. fig. 1.)

Snout rounded, as long as the diameter of the orbit; canthus rostralis very feebly marked; loreal region concave; nostril nearer the tip of the snout than the eye; interorbital space broader than the upper eyelid; tympanum very distinct, nearly as large as the eye. Fingers free, toes three-fourths webbed; disks well developed; subarticular tubercles weak; a small inner metatarsal tubercle. The tibio-tarsal articulation reaches nearly the tip of the snout. Upper parts rough with small conical warts; belly granular, throat perfectly smooth. Blackish above and below; the warts of the upper surfaces appearing as white dots; belly marbled with white; flanks, lower surface of limbs, and hinder side of thighs with irregular white network. Male without vocal sac.

From snout to vent 35 millim.

Two specimens, male and female, presented by L. Wray, Esq.; caught breeding in the water on Hill Garden, Larut, Perak, at an altitude of 3300 feet.

HYLODES VERTEBRALIS, sp. n.

Tongue oval, entire. Vomerine teeth in two oblique groups considerably behind the choanæ. Snout rounded or subacuminate, as long as the greatest orbital diameter; canthus rostralis distinct; nostril nearer the tip of the snout than the eye; fronto-parietals a little concave, their edges slightly prominent, their width equalling once and one third that of the upper eyelid; tympanum distinct, two fifths the diameter of the eye. Fingers moderate, first shorter than second; toes moderate, quite free, fringed; disks quite as large as the tympanum; subarticular tubercles moderate; two metatarsal tubercles. The tibio-tarsal articulation reaches the eye. Back smooth, sides with small warts; belly granular. Blackish brown above; one specimen with a whitish vertebral band; lower surfaces yellow, brown-speckled; groin and sides of thighs with dark-brown network.

From snout to vent 38 millim.

Two female specimens, from Intac, Ecuador; collected by Mr. Buckley.

Distinguished from *H. buckleyi* by a less stout habit, larger digital expansions, and narrower fronto-parietals.

GEOMOLGE, g. n.

Tongue large, subcircular, free on the sides. Palatine teeth in two arched, slightly angular series, separated by a narrow interspace. Toes five. Tail cylindrical at the base, compressed at the end.

Intermediate between *Onychodactylus* and *Ranidens* in the palatine dentition; distinguished, besides, from the former by the absence of claws, from the latter by the shape of the tail, which indicates a land animal.

GEOMOLGE FISCHERI, sp. n. (Plate XXXIX. fig. 2.)

Physiognomy that of *Onychodactylus japonicus*. Head small, longer than broad, broader than the neck; snout rounded; eyes large, prominent; no labial lobes. Body cylindrical, four and a half or five times the length of the head. Limbs in every respect similar to those of *Onychodactylus japonicus*, save the absence of claws; the male likewise with tibio-tarsal dilatation. Tail longer than head and body, cylindrical in its anterior half, becoming gradually compressed and keeled towards the end, which is obtusely pointed. Anal opening subnuciform, as in *Onychodactylus*. Skin smooth; fourteen or fifteen costal grooves; paratoids and gular fold as in *Onychodactylus*. Brown above, with blackish variegations, most crowded on the sides, which also bear some whitish spots; lower surfaces brownish white.

	♂.	♀.
	millim.	millim.
Total length	163	— ¹
From snout to vent	70	80
Head	12	14
Width of head	9½	10
Fore limb	17	20
Hind limb	22	22
Tail	93	— ¹

Two specimens from Chaborowska, on the River Ussuri, Manchuria, collected by Hr. Dörries, of Hamburg; they were obtained for the British Museum through Dr. J. G. Fischer, in honour of whom the new species is named.

EXPLANATION OF PLATE XXXIX.

- Fig. 1. *Ixalus asper*, upper view.
 1 a. ———, lower view.
 2. *Geomolge fischeri*, ♂.
 2 a. ———, side view of head.
 2 b. ———, open mouth.

¹ Tail injured.